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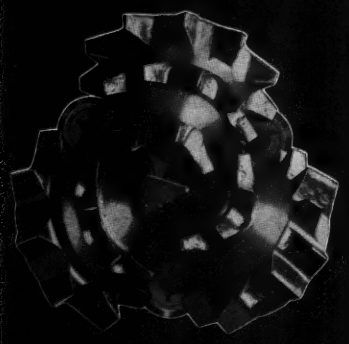
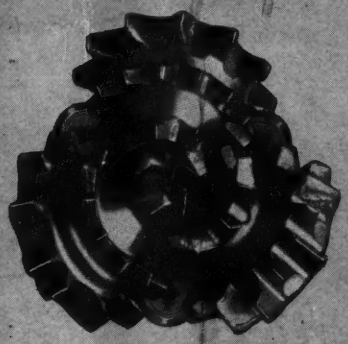
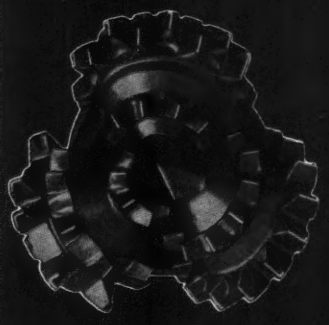


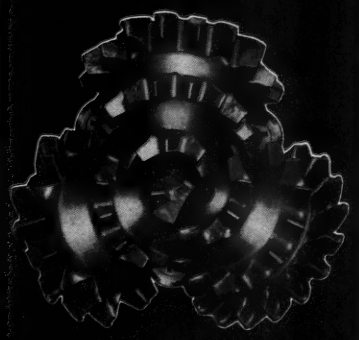
SS3 one of the fastest digging bits for soft, sticky unconsolidated formations.



S3 especially suited for digging unconsolidated broken rock and shale with a minimum of "ball up."

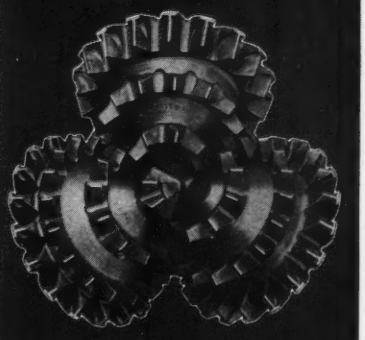


MG3 unexcelled for digging soft to medium shale, gypsum and limestone formations interspersed with hard rock.



M3 enginered for fast digging in medium-hard formations.

MHV3 especially recommended for digging and crushing medium-hard chippable formations.



MHT3 exceptionally efficient for digging medium-hard formations. Has extra reinforcing on all gage cutters.

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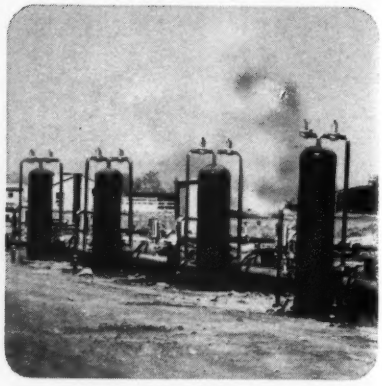
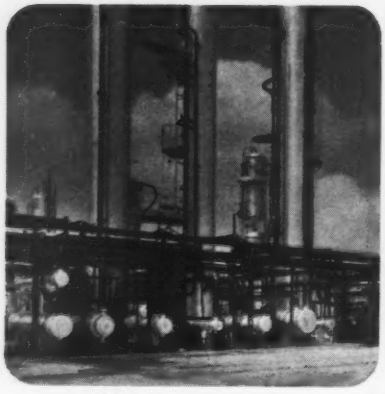

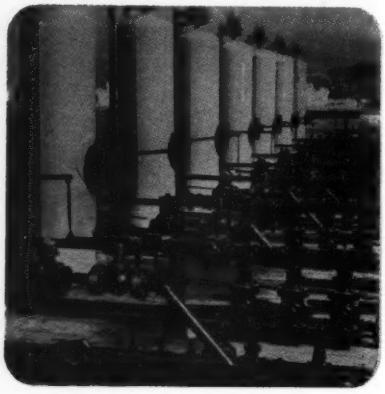

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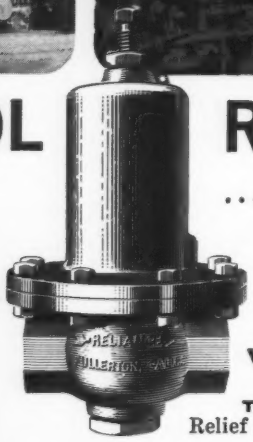

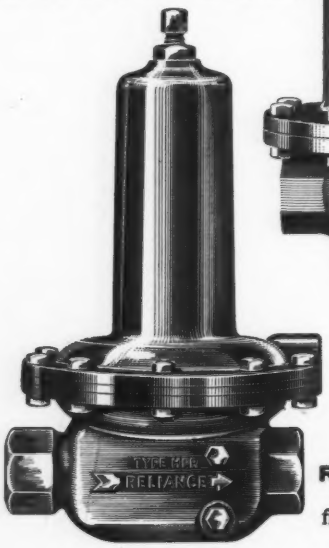

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FULLERTON, CALIFORNIA

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Nine Months of Progress by Standard Oil Company of California

Directors of Standard Oil Company of California declared a quarterly dividend of 50 cents a share, payable December 9 to stockholders of record November 14. The dividend was the company's 139th.

Board Chairman R. G. Follis reported the company's net income for the first nine months of 1960 was $199,255,000, or $3.15 a share, compared with $180,115,000, or $2.85 a share, for the same period of 1959. Third quarter net was $70,666,000, or $1.12 a share, against $61,962,000, or 98 cents, for the equivalent quarter of 1959, the chairman said.

The company's domestic activities showed encouraging progress, accounting for 11 cents a share of the total nine-month increase, the chairman revealed.

Reporting on other phases of Standard's activities thus far in 1960, Follis disclosed the company has made outstanding discoveries this year in Alaska, Canada, California, Louisiana, New Mexico and Texas.

The company's new pipe line and marine terminal system in Kenai Peninsula of Alaska, jointly operated with Richfield Oil Corporation, loaded its first oil tanker about the 15th of this month, Follis announced, the shipment going to Standard's Richmond, California, refinery.

A new era in Mid-Pacific petroleum economics opened when R. G. Follis officially opened first stages of the company's new $65 million Barber's Point refinery to commercial operation.

At the same time he outlined substantial product price reductions as a result of anticipated economies in the new refinery. These included a one cent a gallon reduction in the wholesale price of motor gasoline, a half cent reduction in diesel fuels and related products, and ten cents a barrel reduction in fuel oil. All price changes become effective at once.

Follis made the price announcement at a businessmen's luncheon following Standard's board of directors meeting. After the luncheon, company directors and management traveled to Barber's Point for a brief opening ceremony including a flag raising and the unveiling of a large Standard hallmark at the refinery administration building.

Discussing the price moves, Follis said, "It is significant that these changes will bring the wholesale price of gasoline to a figure only one-tenth of a cent different from the wholesale price today in San Francisco. Thus, we at Standard realize another dream by bringing our major product to the Islands at a price substantially the same as on the mainland."

He pointed out that the company does **not** set the retail price of gasoline at service stations, but indicated they were hopeful the wholesale price reduction would be passed along to the public by individual dealers.

Follis also said that an important result of the company's reduction in fuel oil price will be a lowering of gas and electric rates for the Islands.

"With these new petroleum prices," he said, "we are able to accomplish a change in costs which will benefit the Hawaiian economy

Standard Oil Company's Hawaiian Refinery

and people in a very direct way."

Discussing the refinery, Follis praised state and local officials, suppliers and contractors for their assistance in getting the job done and pointed up the fact that the company's labor relations have been excellent all throughout the project.

President of I.P.A.A. Says Gas Reserves Trailing Demand

The natural gas industry is on the threshold of a supply crisis that could become acute during the 1960s when distribution systems in the nation will be expanded by 50 per cent, Col. Alvin C. Hope, president of the Independent Petroleum Association of America, said recently in Abilene, Texas.

In a speech before the West Central Texas Oil & Gas Assn., Hope warned that discovery of new reserves is trailing demand.

In 1946, there was a 34-year natural gas supply at the demand rate then in effect. In 1959, however, demand rate had cut the supply to less than 21 years.

Hope said a forecast by the American Gas Assn. estimated that during the 1960s there would be an expansion in gas distribution to U. S. consumers by 50 per cent.

"I accept this forecast, but I wish to ask a cautious question," Hope said. "Where is the gas to come from and still have the required years of reserves?"

The IPAA president said a 20-year supply is the contract standard which gas transmission lines and the Federal Power Commission have set up on reserves.

"We will soon be below this 20-year supply at the present trend of supply and demand," Hope warned.

If this crisis is to be avoided, Hope said, there must be Congressional revision of the Natural Gas Act to free gas producers from utility-type regulation of gas sold in interstate commerce.

This regulation, resulting from the U. S. Supreme Court decision in the Phillips Petroleum Co. case in 1954, has hamstrung operators in the search for new reserves, Hope said.

"If a reasonable solution can be found for equitable gas legislation," he said, "so there can be an incentive for the producer, then we, as producers, will find this gas for the great group of gas distributors.

"But if a solution is not found in the foreseeable future to free producers from utility-type regulation, then all segments are going to have their troubles multiplied, because there will be a shortage of gas to take care of normal expansion," Hope said.

The IPAA president said gas distributors, and to a degree the gas transmission companies, have a better understanding of the producer's problems than they once did.

"But there is a tendency to hold back on the very items we think so essential," Hope added.

"Yet if, on the other side of this problem, producers continue to be priced out of the market in interstate sales by too cheap a price, then the end product is the same to them.

"If they cannot get the product because of its scarcity, they are out of business on that portion of the commodity that cannot be secured regardless of what the price might become," he said.

UOP Says Purzaust Will Meet California Standards

Universal Oil Products Company is confident its Purzaust smog-control muffler will meet California requirements, M. P. Venema, president, declared.

The UOP president told the New York Society of Security Analysts that plans are under way to market the muffler when it is certified for use.

"Universal has offered Purzaust to the recently organized California Motor Vehicle Pollution Control Board for testing and certification," he said. "When this testing takes place, we are confident that Purzaust will be certified."

Working With Stanford Research

He pointed out the company has formed Universal Oxidation Processes, Inc., Los Angeles, to supervise manufacture and sale of the muffler for used cars. Universal also has an agreement with Arvin Industries, Inc., to help reach auto manufacturers, covering the new car market.

Universal is working with Stanford Research Institute on development of methods to test exhaust gas purifiers, he said. Results of the study are expected "to facilitate the certification of Purzaust," he said.

Purchase of Catalytic Combustion Corp. by Des Plaines, Ill., process research and development company, plus Purzaust development, will enable UOP "to develop important earnings from the entire field of atmospheric pollution control," he said.

Earnings to Surpass 1959 Figure

Mr. Venema also disclosed UOP is diversifying further into industrial intermediate chemicals. "Our new paranitroaniline plant at Shreveport, La., will begin operations soon," he said. "With this opening wedge, together with plants now under construction for the manufacture of nonyl-phenols, other alkyl aromatics and alkylated amines, we will be able to exploit Universal's developments in industrial organic intermediates."

Mr. Venema said The Trubek Laboratories, in which UOP acquired majority interest this year, is making chemicals for other UOP operations. It also will aid commercialization of UOP research results, he said.

Universal's earnings are in line with earlier forecasts, and 1960 earnings should exceed those of last year, Mr. Venema said. The company earned $3,243,202 last year on gross revenues of $65,359,306.

Royalties are expected to provide about 54% of gross earnings, product sales 26%, engineering, services and fees 14% and construction 6%, he said. These ratios are "generally consistent" with those of previous years, he said.

20% Spent for Research

Dividend policy remains conservative "so that Universal will be able to take advantage of the many opportunities for growth and greater earnings as they arise," he said. Dividend rate is 50c per share per year.

Universal continues to emphasize research. About 20% of gross income of the parent company (excluding subsidiaries) is being spent on research and development this year, Mr. Venema said. This is an 8% increase over 1959 spending.

Briefs of a Few Papers Presented at Pacific Section of the A.A.P.G. S.E.G.-S.E.P.M. Nov. 3-4, 1960

VELA UNIFORM — THE NATION'S QUEST FOR BETTER DETECTION OF UNDERGROUND NUCLEAR EXPLOSIONS

Charles C. Bates
Advanced Research Projects Agency

Negotiations among the USSR, United Kingdom and the United States have been in progress since 1958 in an effort to achieve a treaty for cessation of nuclear weapons testing under an effective control system. To support these negotiations, the President announced in May, 1960, a major expansion of the present research and development program, VELA UNIFORM, directed by the Advanced Research Projects Agency. The program's goal is to provide a markedly improved capability in detecting and identifying underground nuclear explosions during the coming two years. Starting as a $10,000,000 effort in the fiscal year just past, spending during the present year is at the rate of about $66,000,000, making the project the largest terrestrial science effort under way within the U. S. at the present time.

The Advanced Research Projects Agency, with the technical assistance of the Air Force's Technical Applications Center, is employing several approaches for rapidly improving the state of the art in subsurface nuclear test detection. These include a several-fold expansion of the effort going into basic seismological research; procurement of instruments for a world-wide seismic research program; development of improved seismic instruments; construction and operation of prototype seismic detection stations; and an experimental program of underground explosions encompassing both high explosive and, where necessary, nuclear explosions. Already in the program are such government agencies as the Department of Defense, Atomic Energy Commission, Department of Commerce, and Department of Interior, as well as universities and private organizations, both profit and non-profit. Provision has been made for investigation of all aspects of improvement considered feasible. To this end, unsolicited proposals bearing on such improvement from both profit and non-profit organizations, domestic and foreign, are invited. Outstanding unsolved problems include development of a better global knowledge of the layering of the earth's crust, a need for improved instrumentation and data analysis capable of markedly improving signal-to-noise relationships, improvement of techniques for distinguishing at great distances the differences between earthquake and explosion-induced seismic signals, and the providing of on-site inspection techniques that are much more rapid and economical than those existing today.

A CRITICAL REVIEW OF CONTEMPORARY THEORIES OF PETROLEUM ORIGIN

S. R. Silverman
California Research Corporation

The present status of chemical, geological and biological information on the origin of petroleum strongly favors the theory of organic (or biogenic) origin over that of inorganic origin. There is no general agreement, however, on the mechanism or mechanisms by which biologic products become petroleum. Among the various hypotheses offered to explain this conversion, two have received most attention and occupy the forefront of present-day theories of petroleum origin. One, which may be designated as the "Direct-Accumulation" hypothesis, contends that petroleum consists of a selective accumulation of relatively unchanged organic compounds produced by living organisms. Opposed to this explanation are the so-called "Transformationists," who believe that biologic source materials must undergo marked chemical transformations, under the influences of temperature, pressure, and lithologic environment, before they are converted into petroleum. A critical review of available chemical and geologic information on petroleum and other organic materials in ancient and modern sediments suggests that chemical transformations play an important role in petroleum formation, sufficient to account for the major part of the gravity anomaly. The gravity effect of a hypothetical reef was calculated. The result was very much like those actually observed. The gravity anomaly depends mainly on what has happened after the reef was buried, and not on the contrast at the reef level.

CALIFORNIA OFFSHORE OIL —PRESENT AND FUTURE

F. J. Hortig
State Lands Commission

The base for report of the status of present development of offshore oil and for prediction of future developments is contained primarily in the past history of California offshore development, starting with the first tideland well drilled in 1896. Current annual (1959) production from State-leased offshore lands is fifteen million barrels from Orange, Ventura and Santa Barbara counties. In addition, production has been developed from offshore lands granted by the State to municipalities at Newport Beach, Long Beach and Redondo Beach.

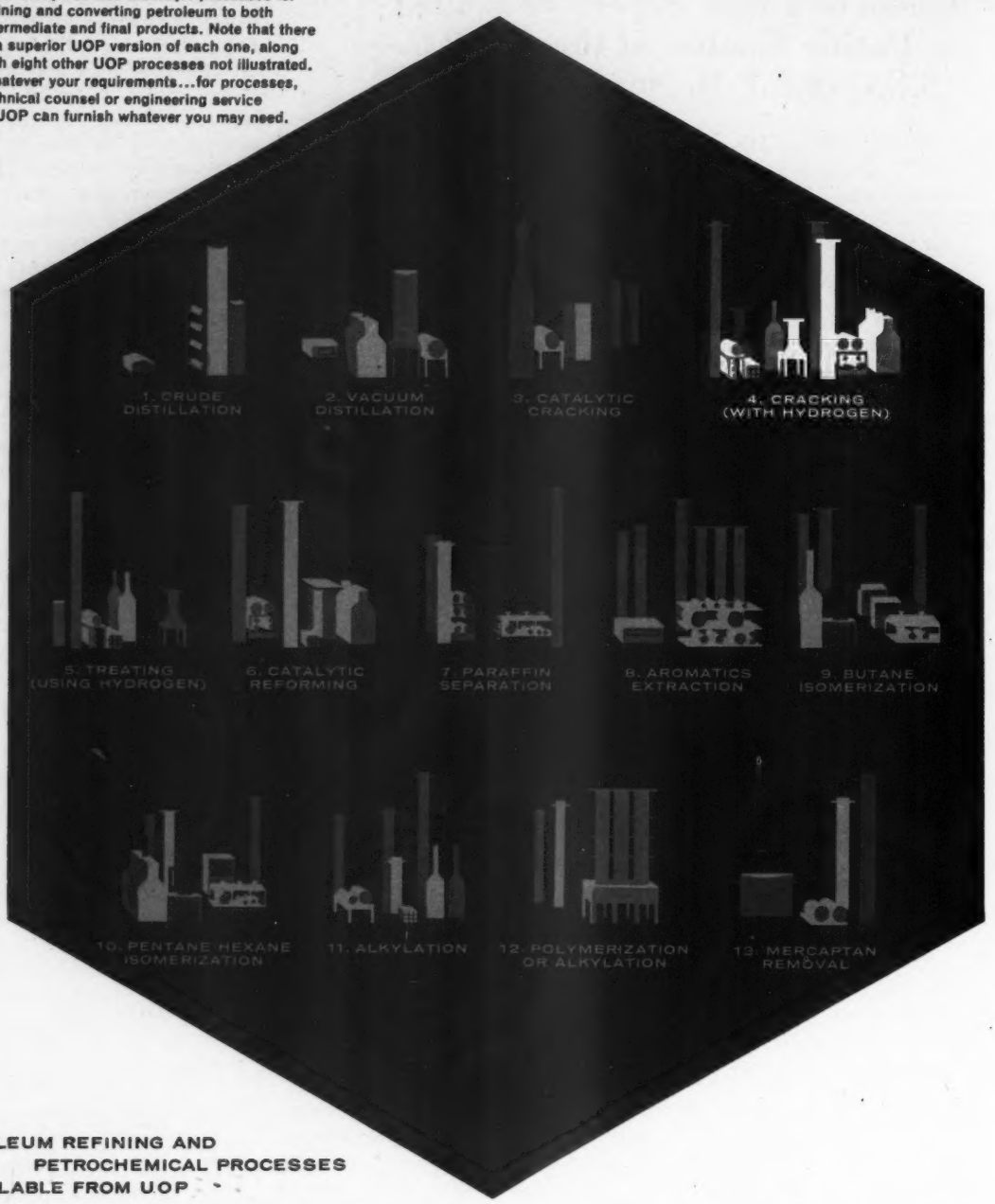
Five leases, comprising 19,200 acres, are under exploration development in Santa Barbara County. Potential lease offers are under review by the State Lands Commission in both Santa Barbara and Ventura counties. Submarine seismic and geological (core drilling) surveys are being continued over the majority of the Southern California offshore area extending seaward to the Channel Islands. Exploration and technological developments in drilling and production indicate that the maximum California offshore development will be achieved in the future.

THE EFFECTS OF FOREIGN IMPORTS ON DOMESTIC EXPLORATION AS RELATED TO THE INDEPENDENT PRODUCER

Michel T. Halbouty
Consulting Geologist and Petroleum Engineer
Independent Producer and Operator

Imports of petroleum, a commod-

Here are symbolized the major processes for refining and converting petroleum to both intermediate and final products. Note that there is a superior UOP version of each one, along with eight other UOP processes not illustrated. Whatever your requirements...for processes, technical counsel or engineering service ...UOP can furnish whatever you may need.



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3. **FLUID CATALYTIC CRACKING**—an improved process that gives higher yields, higher octane numbers.

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5. **UNIFINING™**—a modern process that completely purifies petroleum distillates.

6. **PLATFORMING®** produces high octane gasolines, high purity aromatics.

7. **MOLEX™**—a new continuous separating process that removes lowest-grade hydrocarbons from gasoline.

8. **UDEX®**—the ideal process for separation of super-purity aromatics.

9. **BUTAMER™**—a new and practical process for producing isobutane.

10. **PENEX®**—a new process that converts light, normal paraffins to isoparaffins.

11. **HF ALKYLATION**—makes alkylate, top anti-rumble motor fuel. Sulfuric acid process also available.

12. **CATALYTIC CONDENSATION**—converts olefin fractions of refinery gases into high-quality gasoline and petrochemicals.

13. **MEROX™**—a new and inexpensive treating process to remove mercaptans from gasolines and light distillates.

PROCESSES NOT ILLUSTRATED:

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CATALYTIC DEHYDROGENATION—removes hydrogen from hydrocarbons to produce less-saturated hydrocarbons.

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HYDRAR™—converts benzene to cyclohexane with excellent yields, achieves extreme high purity with Udex grade benzene.

OLEFIN EXTRACTION—efficiently separates olefins and diolefins from paraffins; prepares olefins for further conversion.

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ALKAR™—produces ethylbenzene, cumene and other alkylated aromatics from Fluid Cat Cracker off-gas streams.

UNISOL®—an economical process for treating high mercaptan-containing gasolines.

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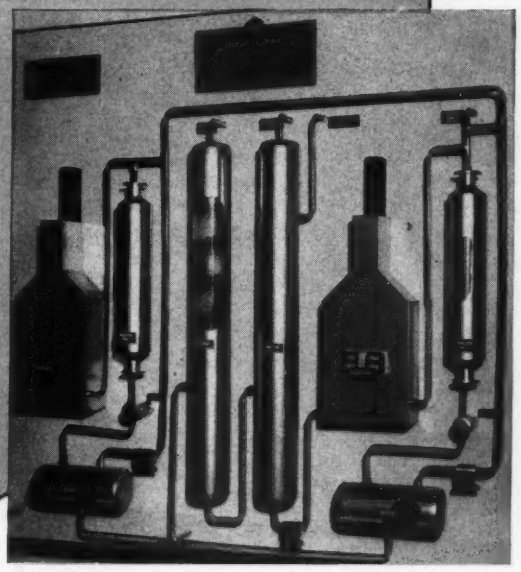
With UOP processes the refiner can accomplish just about anything that comes within the realm of practical petroleum refining technology. Take a look at the brief descriptions on the opposite page, and you'll agree. And remember, in many cases existing equipment can be revamped and expanded, and thereby will produce more saleable products.

*INFORMED OPINION indicates that 1962 will require a substantial increase in process capacity ...NOW is the time to start your planning! Ask us about a preliminary proposal... no obligation!



LOMAX™ With this new and highly flexible UOP process, model of which is shown above, the refiner is able to increase production of his most currently saleable product on a year-'round basis. Through the catalyzed reaction of oil with hydrogen, LOMAX converts middle distillates ranging from kerosines to heavy gas oils into a wide ratio of gasoline or distillate fuels.

As seasonal demands change, LOMAX production of these products is adjusted accordingly.

Important additional benefits afforded by LOMAX include distillates of exceptionally high purity (even from sour crudes) . . . predominance of branched isomers in light hydrocarbons . . . greatly reduced quantities of light gases . . . olefin-free products . . . long catalyst life . . . and other advantages.

LOMAX may be used to supplement existing facilities, or as a basic cracking operation in a new installation.

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WHERE RESEARCH TODAY MEANS PROGRESS TOMORROW

ity upon which the very existence of this country depends, should never reach such a point that they discourage domestic exploration. Today, there is no reliable foreign source of oil for this country. Where there is political instability, and even strong Communist dangers, this includes all important foreign oil producing countries, the source of supply to this country and its allies can be sealed off overnight. Even a temporary cut-off of our oil supply would cause serious economic dislocations. Our dependence must be on domestic oil as long as such a source is available.

At the same time, however, a certain volume of imports is needed to relieve the pressure on domestic production and to help adjust to constantly changing conditions in domestic economy. Major importing companies, having tremendous investments made at government behest, should be permitted to import their quotas based on the present mandatory import control. However, imports should supplement, but not supplant domestic production of oil.

Assuming that domestic production and exploration are vital to our national welfare, demand and price of domestic petroleum must remain economically healthy. We must have a constant incentive to find and produce oil; for without that incentive it will be impossible to attract necessary investment capital. In times like the present, when crude oil surpluses depress markets and threaten prices, imports should not be permitted to accent this condition. When prices drop, opportunities for profit are fewer, and risk capital finds a more favorable climate outside the expensive business of petroleum exploration.

The backbone of exploration in the United States is the independent. The independent has drilled the most exploratory wells and discovered the majority of our reserves. It is the independent who stabilizes the domestic oil industry by his continued efforts to explore in places and to depths where most large integrated companies probably would not. No act, such as excessive imports, should be permitted to cause the independent to curtail his continued search for new reserves.

Summary of Dist. V Oil Industry Conditions August (and September Preliminary) 1960

By OIL PRODUCERS AGENCY OF CALIFORNIA

Highlights

Noteworthy in the U. S. Bureau of Mines District V report for August is that imports of residual fuel continued, and at an accelerated rate. In August they were 41,000 B/D, compared with 26,000 B/D in September, and for the first eight months of this year they averaged approximately 11,000 B/D. There were no such imports in the first eight months of last year.

Residual fuel stocks increased 34,000 B/D in August, making it apparent that without the 41,000 B/D of imports local supply of the product would have failed to meet demand by 7,000 B/D.

Even with the increase of 1,052,000 barrels in residual fuel inventories, they were, at 15,594,000 barrels, lower at August 31 than at any August 31 in the five years 1955-59, inclusive.

It appears that the residual fuel problem now is one of adequate supply, rather than management of a surplus.

Because of a 76,000 B/D withdrawal from gasoline inventories, which offset both the residual fuel and other additions to storage, total petroleum stocks showed no change in August.

A summary of the U. S. Bureau of Mines District V report for August, with an estimate for September based upon American Petroleum Institute and U. S. Bureau of Mines weekly data, follows.

Total Supply, Demand, and Stocks

Preliminary figures for September indicate that total supply was 1,436,000 B/D, demand was 1,411,000 B/D and stocks increased 25,000 B/D. This increase, 750,000 barrels during the month, would bring total stocks to 118,371,000 barrels on September 30, compared with 128,316,000 on September 30, 1959. The year's decrease was 9,945,000 barrels.

Crude Production, Imports and Stocks

Weekly figures for September indicate that crude production was 828,000 B/D, imports were 309,000 B/D, and stocks increased 21,000 B/D. This increase, 630,000 barrels for the month, would bring stocks to 31,203,000 barrels on September 30, compared with 34,253,000 on September 30, 1959. The year's decrease was 3,050,000 barrels.

Gasoline Supply, Demand, and Stocks

Weekly figures for September indicate that gasoline supply was 619,000 B/D, demand was 645,000 B/D, and stocks decreased 26,000 B/D. This decrease, 780,000 barrels for the month, would bring stocks to 29,409,000 barrels on September 30, compared with 28,019,000 on September 30, 1959. The year's increase was 1,390,000 barrels.

Distillate Fuel Supply, Demand, and Stocks

Weekly figures for September indicate that distillate fuel supply was 197,000 B/D, demand was 193,000 B/D, and stocks increased 4,000 B/D. This increase, 120,000 barrels for the month, would bring stocks to 15,714,000 barrels on September 30, compared with 16,785,000 on September 30, 1959. The year's decrease was 1,071,000 barrels.

Residual Fuel Supply, Demand, and Stocks

Weekly figures for September indicate that residual fuel supply was 318,000 B/D, demand was 258,000 B/D, and stocks increased 60,000 B/D. This increase, 1,800,000 barrels for the month, would bring residual fuel stocks to 17,629,000 barrels on September 30, compared with 26,464,000 on September 30, 1959. The year's decrease was 8,835,000 barrels.

Bulletin on Heviwater Offered by Dowell

A bulletin just issued by Dowell Division of the Dow Chemical Company contains information giving the description of Heviwater, its applications, effects of temperature and tables helpful in quickly determining what and when to use its varied possibilities.

The bulletin may be obtained by contacting Dowell's local district offices.

J. G. Bridgeman

J. G. Bridgeman Elected To National Safety Council

J. G. Bridgeman of Whittier, Shell Oil Company's safety representative in its Pacific Coast Area, has been elected to the National Safety Council.

Attending the annual National Safety Congress in Chicago, Bridgeman was selected chairman of the engineering committee of the petroleum section's executive committee on the Council.

Corcoran Speaker at Long Beach Desk & Derrick Meet

Mr. Mark R. Corcoran, attorney for Phillips Petroleum Company, was the guest speaker at the Desk and Derrick Club regular dinner meeting held in the Music Room at the Biltmore Hotel on November 15, 1960. Mr. Corcoran, who has been in the Land Department at Phillips for the past ten years, selected "Land and Leasing" as his subject.

The purpose of the Desk and Derrick Club is to promote among women employed in the petroleum and allied industries, through informative and educational programs, a clearer understanding of the industry they serve to the end that the enlightenment gained thereby may increase their interest and enlarge their scope of service.

A field trip to the Union Pacific Railroad's operations in the Wilmington Oil Field was scheduled for Saturday, November 19.

The Los Angeles Desk and Derrick Club, comprised of over three hundred members, was organized ten years ago.

New Officers for Forthcoming Year Announced

Thomas A. Baldwin, president of the Pacific Section, American Association of Petroleum Geologists, announced at the close of the 37th Annual Meeting the following new officers at the helm of the Pacific Section:

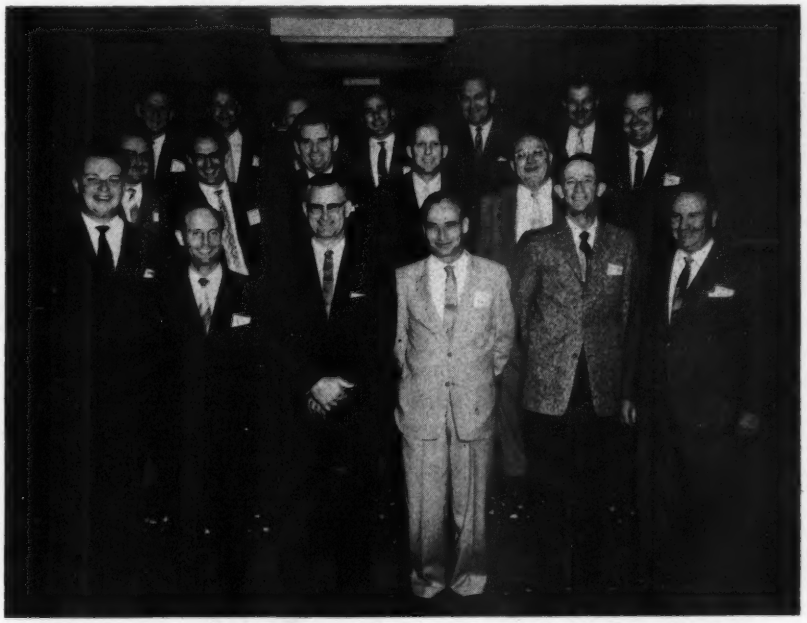
President, Irving T. Schwade, Richfield Oil Corp.; vice president, Richard E. Faggioli, Humble Oil & Refining Co.; secretary, Robert O. Patterson, Pacific-Oil Well Logging; and treasurer, Richard L. Hester, Pauley Petroleum, Inc.

Forrest F. Lambrecht, retiring president of the Society of Exploration Geophysicists, announced simultaneously the following new officers for that society:

President, Bart W. Sorge, United Geophysical Company; vice president, Southern District, Marc O. Miller, Continental Oil Co.; vice president, Northern District, Allen J. Garber, Jr., Texaco Inc.; secretary-treasurer, Roy R. Farnsworth, Shell Oil Company; and editor, William O. Murphy, Jr., Standard Oil Company of California.

Weldon Rowe, president of the Society of Economic Paleontologists and Mineralogists, announced that the following men would assume office at the close of 1960:

President, Edwin H. Stinemeyer, Shell Oil Company, and secretary-treasurer, William J. Lewis, Standard Oil Company of California.



International guests at the November 9, 1960 meeting of the Los Angeles Chapter of Nomads. Left to right (front row): Siegfried Thomas of DEA from Germany; Herbert Zweifler of Preussag from Germany; Fred Poveto of Camdrill from Libya; Jesse Metheson of Santa Fe Drilling from Africa; J. E. Bacot of Q.P.C. from Trucal Coast; Guy Goldsmith of Aramco from Saudi Arabia; (middle row): Heinz Lettner of DEA from Germany; Achim W. Weide of Fagro from Germany; Fred L. Watkins of Arrow Drilling to Iraq; C. B. Welch of Santa Fe Drilling from Trinidad; Ray Conger, ex-Brown Drilling Co. from Guatemala; D. S. Campbell of Santa Fe Drilling from Iran to Chile; (back row): H. P. Downey of Arrow Drilling to Iraq; H. E. Schumacher of Camdrill from Libya; Elmer Jones of C. S. V. from Venezuela; G. T. Graves of Arrow Drilling to Iraq; Nomad Connie Ridgeway of Macridge from Lebanon; Herbie Berk of Petrobras from Brazil.

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Coupled with our faster perforating service, Oil Tool gravel pack liners are made to your exact specifications, with gravel thoroughly vibration compacted to insure uniform porosity. Specialized equipment, experienced manpower and any kind of tubular service you desire ... day or night. That's what we mean by service is Oil Tool.
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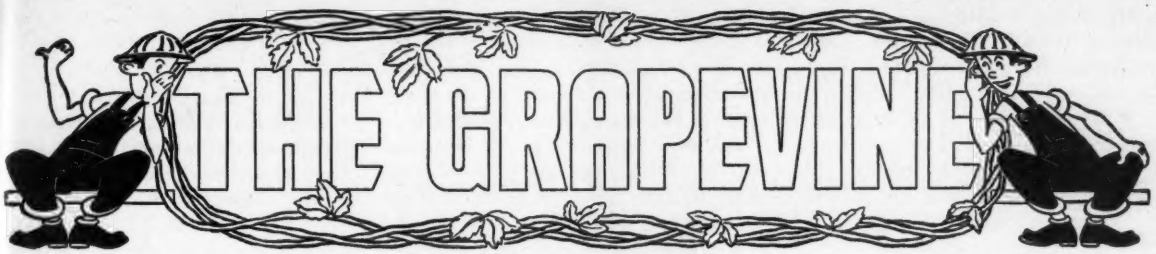


By RICHARD SNEDDON

The Purchasing People

It has been our good fortune over many years to know many purchasing agents and buyers in the petroleum industry, in most instances much more than casually. This is probably because we never have had anything to sell and they were glad, despite our general insipidity, to have a brief respite from the constant oral assault to which they are normally subjected, or at least to exchange it for another form of oral assault. In any case, we have enjoyed and are still enjoying the friendship of some pretty substantial practitioners of the procurement art in its diverse phases. For example, there are people like Joe Taylor, the very approachable, easy-to-knowable former purchasing executive of Socony-Mobil in New York, now living in the lap of luxury at Rowayton, Conn., and dashing out here at least once a year to restock his wallet at the expense of sundry gin rummy softies; Bill Beck, who, when Joe retired some years ago, took over without dropping a stitch, and besides being a real nice guy in practically all respects, is our particular proof of the indestructibility of matter; Howard Bratches, Shell's director of purchases or something just as terrific, in New York, a little less demonstrative, perhaps, than Joe Taylor, a little less robustious than Bill Beck, but a thoroughly capable and altogether likable chap just the way he is; and rounding out the Manhattan roster, A. W. "Daggie" Dagistino, purchasing chief for The Lummus Company, popularly known as "Eddie Arcaro," a little guy with a big sense of humor and an entertaining flair for interesting narration and debate.

The Local Ones

Out here we have to start with that grown-up whiz kid, he of the infectious grin, Charlie Perkins, who leads the forces of acquisition for the 7600, is the only person ever to be showered with ticker tape from the Los Nietos skyscrapers, and when it comes to figures, makes a digital computer look like an old fuddy duddy. Then there are Hardy Klarquist, ably functioning for Standard-Western up in Herb Caen's Baghdad by the Bay, and is our nominee for the best looking P.A. in the petroleum business; Ed Thatcher, top barterer for the Southern Division Chevronites, a perennially good natured fellow with a highly developed sense of evaluation; Rex Hensel, quietly studious, orderly minded, and totally sympathetic garnerer of essentials for the T. C. P. brigade, to whom we personally are indebted for many kindnesses; Emory Squires, the biggest boron buyer in California and a delightsome person whose frontispiece is invariably wreathed in smiles and is consequently a natural radiator of sunshine; Jim Ross, the affable Caledonian bargain hunter who searches the market places in behalf of the flying horsemen; Ed Borg, the tall, pleasant-mannered, athletic looking lad who carries the shopping bag for Texaco in this area and knocks a golf ball so far it tires him to death to walk out to it; and then there are the new, up-and-coming ones such as Kenny Dale, the cheerful chap who scours the sarouks and bazaars for Signal Oil & Gas Company, and Bob Saxton, personable young acquirer of goods and chattels for Belridge Oil Company, who never lost hope or his keen sense of humor while fighting a long uphill battle in which he completely routed the health gremlins. There are others, of course, like Claude Lane, who always looked naked without a string of ducks over his shoulder, and Paul Whiteley, the noted gin rummy and domino gamester, both now living like country squires in a comforting aura of congenital companionship and relaxing inactivity.

Some Background

All of this is introductory to the fact that we have lately been thinking much about the advance of purchasement and when we concentrate on something of that sort, it is really quite astonishing what can develop. It is likely that in the early history of South European commerce some unscrupulous salesman once put over a fast deal on a Roman procurement officer. The latter, nettled to the quick, promptly sent out a warning to all his fellow members in the P.A.A.M.M. (Purchasing Agents Association of Medieval Mediterrean). The message consisted of two words, caveat emptor—"let the buyer beware." This phrase has persisted down to our own time but is now almost solely used by speakers at P.A. banquets to demonstrate their familiarity with Latin.

Be Sure to Caveat

It is also now a sort of stipulation in law, that in any kind of a sales transaction, the onus is on the buyer to be alert for any indication of skullduggery. For instance, it is to be presumed that if you buy a watch from an itinerant peddler only to find after paying for it that it won't go, you can't legally do much about it unless there has been misrepresentation and the peddler has told you that the thing is in good running order. As the buyer you are expected to be observing and inquiring and to develop such pertinent information if the seller doesn't volunteer it. So, please, all you emptors, from now on remember that you have a responsibility to your profession to caveat before closing a deal!

First Plastic Surgeons

If some of our early salesmen were people of whom it was well to beware, however, there were buyers, too, who were anything but lovable characters. Victor Hugo's "L'homme Qui Rit" (The Man Who Laughs) is the life story of a victim of the

comprachicos, a pretty despicable species of human. These were "baby purchasers" from the Spanish Comprar, "to buy," and chico, "a child," and they seemed to flourish at the beginning of the 18th century. Buying a baby is not a high type enterprise unless the gesture is stimulated by worthy motives. But these comprachicos were morally lower than the nether epidermis of a rock cod. They bought the youngsters so that they could perform crude plastic surgery on their faces and thus invest them with perpetual grins or other irradicable facial contortions. Then they sold the little fellows to circuses and street performers as clowns. It is all pretty horrible! We read "The Man Who Laughs" while still very young and impressionable and for a long time thereafter found little joy in being out after dark.

Evolutionary Facets

There have been great changes in the purchasing business down the years. While we were in the employ of a large industrial concern our office was on the same floor as that of the purchasing department. We recall that there were usually many salesmen in the reception room when we arrived at 8 a.m. to start work and we recall also that most of them were still there when we left at 5 p.m. In these days the only way to insure an audience with a buyer was to marry the receptionist. And as for a chance to genuflect before the august presence of the P.A., that was a privilege that was extended only to a favored few industrial aristocrats.

The Modernized System

Now purchasing has blossomed into a rationalistic profession and P.A.'s no longer spend their lives dodging peddlers. The old idea that purchasers and salesmen were natural enemies has died. Buyers and sellers openly cultivate each other to the distinct advantage of both. As a matter of fact, we are all salesmen. The buyer sells a specific need and the salesman sells his ability to fill that need. And, it doesn't matter what you are trying to sell—the virtue of a political candidate, your ability to create ideas, your flair for translating ideas into tangible and profitable realities, a product, or a service, your success will depend almost entirely on your capacity to state your case lucidly and convincingly. We shall talk more of how to do this anon and it is pretty important, but for the moment we must leave the purchaser and talk of other matters.

From the Land of the Wallaroo

We were one of a group of press people who were hosted by Frank Morgan at a lunch in the California Club for the purpose of saying hello to a very interesting gentleman from Perth, West Australia, to wit, Malcolm J. L. Uren, assistant managing editor of West Australian Newspapers Limited. This organization disseminates up-to-the-minute news to an area of a million square miles with a population of approximately 650,000, over half of whom are subscribers to its publications. It is a land of great opportunity and there are few who know as much about it and its people as Malcolm Uren. He is both a student and an able expositor, has a noted comprehensive library of Australiana and is thoroughly convinced with most of his fellow countrymen that his native land has come of age. Besides promoting the sale of home-made goods abroad, he feels that his people have a way of life to sell and most particularly have to do a job of dissipating the ignorance that currently prevails about the exciting continent down under.

International Relations

Mr. Malcolm is an eloquent and dedicated expounder of the realistic approach to international relations and he is convinced above all things that with the United States his country could enter into a virtual partnership, perhaps unwritten, that would be of inestimable benefit to both. We are peoples with similar origins, the same fervent love of freedom and desire for peace, ample resources, and ample resourcefulness, and there is little doubt that each could be profitably complementary to the other. Australians have an innate regard for Americans. They are industrious, ambitious, and they are genuinely grateful for the protective role we played during the dark days of the South Pacific encroachment. We have the technical skills in many industrial fields to engage in a mutually beneficial program of development. They are proud of their independence and of their progress and are not interested in handouts but would welcome investment. With men of the high caliber of Malcolm Uren representing Australia, it could certainly be a comforting and productive relationship.

The Coverage

We have enjoyed perusing a 66-page Saturday edition of The West Australian, the principal publication of the organization in which Mr. Uren is a top officer. It covers the world scene with complete adequacy but does not in any way neglect area news. In all respects it is a substantial and informative newspaper and it is easy to understand why its publishers should be proud of their handiwork. We were especially interested in "Big Fella Walkabout," a perceptive impression of the United States by two West Australians, Paul Rigby and Kirwan Ward. This is an amusing, well written and totally entertaining account of a 30,000-mile trip, a considerable part of it in the U. S. One section relative to a tour of the Salinas Valley with a stop at Coalinga has especial appeal to oilmen. It was under the direction of Standard of California's ambassador of goodwill, Ted Huggins, and the authors speak kindly of the hospitality of our old buddy, Frank Spurlock, Standard's field superintendent. Altogether, meeting Malcolm Uren and getting a sample of his wares was a delightsome experience, and we are much indebted to Frank Morgan for making it all possible.

With the Bridge Builders

Another Petroleum Club bridge contest has passed into oblivion and it produced some hectic competition and some quite astonishing disappointments. The short-odds favorite to clean up were Leo and Mary Shriver, a pair of ringers who were imported by Tommie and Mary Johnston. However, somewhere along the way Leo fumbled, Tommie recovered and in a few short plays had himself emerged the winner of the men's trophy, which he now wears proudly in his wallet. Runner-up in the male bracket was Bob Roberts, who gave a dazzling display of throwing off and trumping but finally lost by the narrow margin of 2,500. Leading the ladies at the finish was Laura Heiser, who just barely nosed out Helen Bedford in a last-minute dash that had the crowd in hysterics. Engaging in this exciting enterprise were Walter and Lucile English, Bob and Nina Roberts, Art and Laura Heiser, Larry

and Nadine Graham, Ed and Helen Bedford, Don and Faye Grubbs, Harvey and Lelia Parr, Dutch and Bernice Schmieder, Tommy and Mary Johnston, and Leo and Mary Shriver. Next meeting of the group will take place in January, and in the meantime, anyone interested in lessons should call Tommy Johnston or Laura Heiser.

Bits of This and That

By way of last-minute roundup, Elmer Olsen, assistant to the regional vice president and regional manager of Standard-Western, will take over as secretary of Petroleum Production Pioneers as of January 1, 1961. Judge Saatjian announces that the following have been nominated for life membership in P.P.P.: Lewis J. Bauer, George C. Braniger, H. L. Briggs, E. M. Delaney, Richard Florian, H. T. Gilstrap, David B. Meek, George Ruggels, and Fred Weaver. Nominated to the board of directors of the Petroleum Club of Los Angeles are Dick Faggioli, Fred Tanner, and Stark Fox. Congratulations to Dudley Tower, recently elected president of Wilshire Country Club. Gordon Campbell, the very efficient treasurer of the Petroleum Club of Los Angeles, was presented by the directors, officers and members, a set of inscribed gold cuff links and tie pin in gratitude for his fine work. And as we go to press comes the sad news of Alex Grant's death. Alex was a grand person, former purchasing agent for Western Pipe & Steel Co., and father-in-law of our favorite actor, Hans Conried.

More of the Same

Did you know that Don Grable is now giving his all for Blackwell & Sunde? Pick McIver is back on the beam again after a siege of observations and experiments at Long Beach Memorial Hospital. The PPP Long Beach Luncheon Club which meets at the Petroleum Club of Long Beach on the third Wednesday of the month is growing like a house afire under the direction of Andy Anderson. November speaker was Cy Rubel who, as usual, did an excellent job of expounding on the history of the California oil industry with entertaining and humorous sidelights. Same can be said for Tom Selser's Retired Oil Men's Club which meets at noon on the first Monday of the month at the Biltmore Hotel. Bill Smith has severed his connection with Baash-Ross and is now president of Smith Dynamics Division of Smith Tool Company. Tom Ashe, Globe Oil Tools, is roaming around Trinidad as we write and so is Bill Brannon. Don Smith, the Alcoan, is home following an extensive tour of South America and Trinidad. Which is all for now. Cheerio!

Attending annual sales meeting of Byron Jackson Tools, Inc., held recently at Houston, Texas, were (top row, left to right): I. B. Bryan, R. T. Todd, R. T. Harcus, A. R. Boyd, A. W. Rose (President of Byron Jackson Division of Borg-Warner Corporation), W. C. Brooks, V. J. Carter, W. F. Roberts, Jr., and O. J. File. (Bottom row, left to right): A. E. Jordan, R. E. Leasure, J. F. Buckner, J. P. Kirby, H. C. Starr, P. A. Jordan, G. F. Nicolson, R. J. Evans, Jr., and J. S. Smith. Also present but not shown in the photo were Dr. B. W. Gamson, V. W. Hillyard, R. G. Taylor, Jr., and John Ramsey.

BJ Tools Stresses New Products At Annual Sales Meeting

Development of new tools and services for the oil industry was the theme of the annual sales meeting of Byron Jackson Tools, Inc., held recently at Houston, Texas.

The two-day conclave, attended by upper management executives and divisional and regional sales managers from all parts of the United States, was directed by R. J. Evans, Jr., vice president and domestic sales manager. Andrew W. Rose, president of Byron Jackson Division of Borg-Warner Corporation, and Robert T. Harcus, vice president and general manager of BJ Tools, also participated.

Keynote of the meeting was the company's intensified new product research and development program, which has resulted in many new tools and services for the industry in the past two years, as well as refinements in standard BJ "Red Iron" equipment.

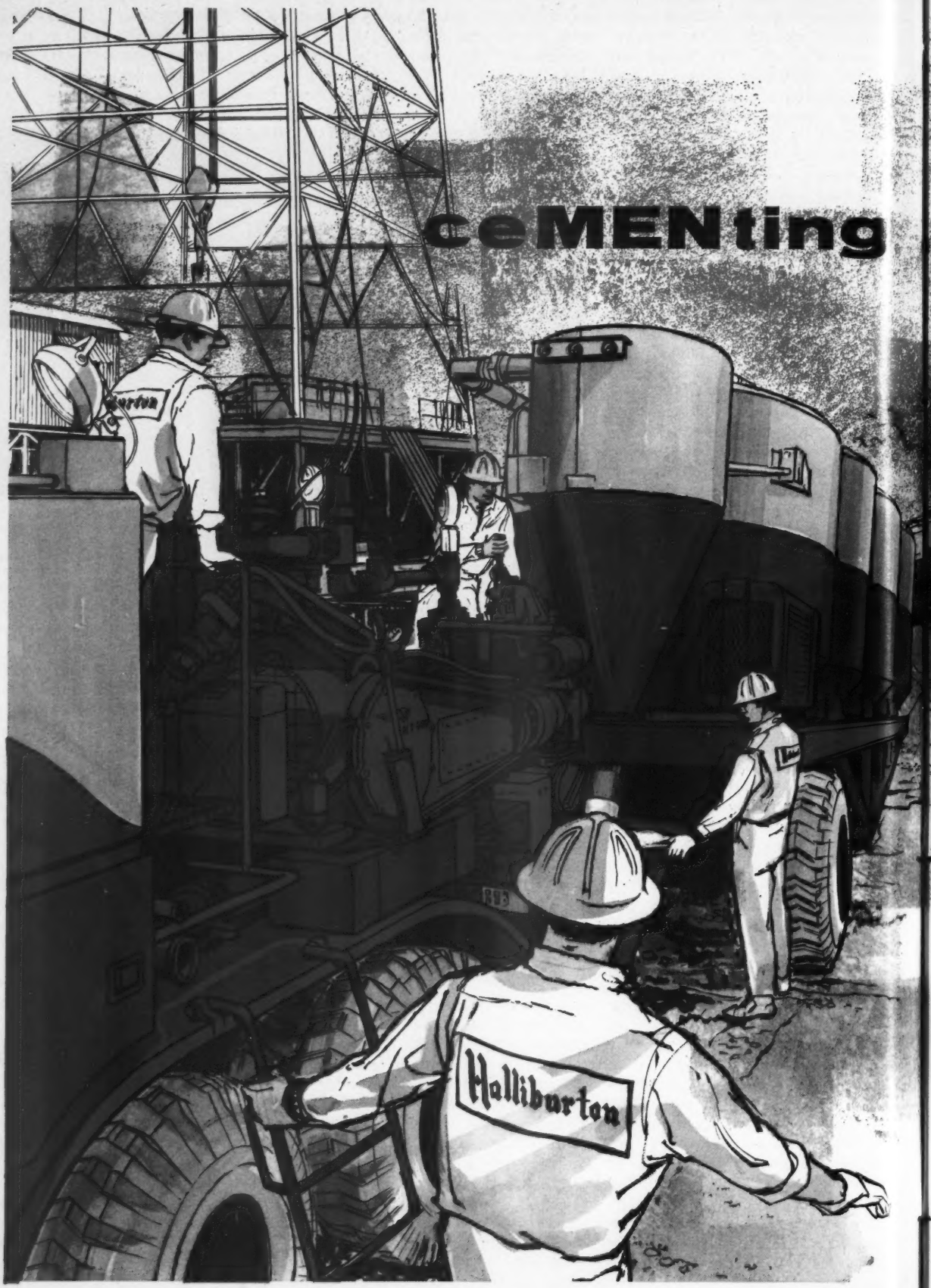
New product developments named by Evans include a 350-ton Combination Elevator-Spider for deep holes and long casing strings; a Power Tubing Tong Back-up that eliminates the separate back-up tong and hanging line formerly required with power tongs; a low-cost friction grip stop collar that can be used with both hinged and rotating type wall scratchers and new developments in swabs and in tubing protectors.

Other Byron Jackson tools either in production or in the research and development and field-testing stages include new power pipe-handling tools, hand slips and tongs, elevators and tubing spiders and a variety of downhole rubber products, Evans said.

In addition to Rose, Harcus and Evans, other BJ executives who attended the meeting included G. F. Nicolson, vice president and assistant general manager; Ray G. Taylor, manager of engineering; Dr. B. W. Gamson, vice president in charge of new product developments, and John O. Ramsey, advertising consultant.

Byron Jackson Tools, a Borg-Warner subsidiary, manufactures such basic pipe-handling tools as hooks, links, elevators and tongs.

The company also designs and manufactures tools for rig automation, such as power slips, power tubing spiders and power tubing tongs.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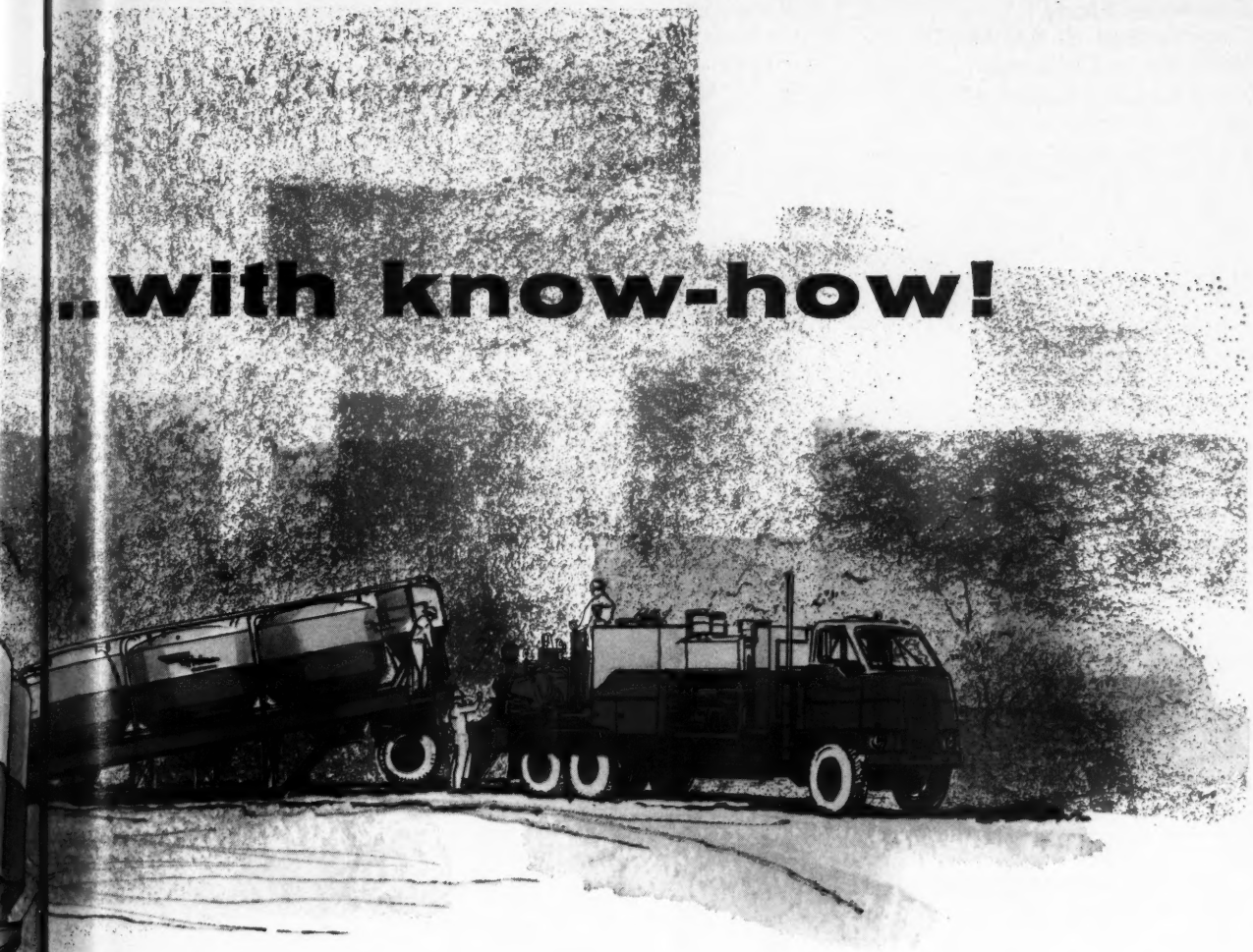
..with know-how!



The three basic ingredients Halliburton depends on to provide you the very best in cementing service are men, materials, and machines. Men who design and operate the machines, and men who develop the materials . . . *these* are the men with cementing *know-how.*

Even more than the modern Halliburton equipment and advanced materials, successful cementing operations are linked directly to the capability of the Halliburton man.

You too can depend on him . . . as everyone has for over three decades!

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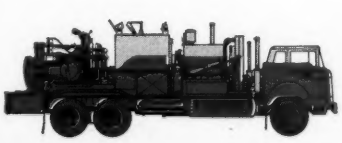


Halliburton

COMPANY • DUNCAN, OKLAHOMA

Tidewater Starts Construction of $20,000,000 Refinery in California

"In step with Tidewater Oil Company's established leadership in building the most modern refineries, another major construction program at the company's Avon Refinery in the San Francisco Bay area will begin immediately," George F. Getty II, president, announced.

Tidewater will construct the West Coast's first large commercial Isocracking plant, at an estimated cost in excess of $20 million, as part of its continuing expansion of Flying A manufacturing facilities, Getty said. This is another step in the company's over-all modernization and expansion program launched in 1953.

Construction of the ultra-modern facilities will include a 20,000-barrel-per-day Isocracking unit, a 50 million-cubic-foot hydrogen generating plant, and other equipment. Actual construction is scheduled to get under way early in 1961.

The exceptionally high-octane gasoline produced by the Isocracking process will continue to give superior road performance to meet the growing requirements of western motorists for higher quality gasoline, Getty said.

The new process will be licensed from the California Research Corporation.

Republic Supply Cuts and Threads Pipe

Establishment of completely equipped facilities for cutting and threading pipe to specification has been announced by vice president and sales manager R. M. Chewning of The Republic Supply Company of California.

Chewning said Republic is offering the new service as an added convenience to customers. He stated that a large variety of cutting, beveling, threading, and grooving services are now available, as well as flange make-up and production pipe bending on many stock items. He added that Republic will do work on customers' pipe on a quotation basis.

Pipe in stock includes a large selection of continuous weld, seamless and electric weld carbon steels, in addition to stainless steel, genuine wrought iron, brass and aluminum.

J. & L. Brochure Gives Specifications and Load Limits

A 16-page illustrated brochure giving the specifications and working load limits for the company's line of alloy chain slings, rings, links and hooks has been issued by the Wire Rope Division, Jones & Laughlin Steel Corporation, Muncy, Pa.

These new items are the latest addition to J&L's complete safety in lifting line, which also includes all standard and custom wire rope; single part, cable laid and braided Jal-Flex slings; JalKlamp, Jalloc, and hand splices; manila and synthetic ropes; hand and power hoists; synthetic and woven wire belt slings; and other custom-engineered lifting products.

The new literature describes the advantages of alloy chain slings over wrought iron or carbon steel chains. It also presents the design advantages of Jallink, the company's permanent, tamper-proof alloy chain connector link.

How to use and maintain chain slings and their attachments is concisely explained. Four points of a good periodic inspection program and the danger signals to look for in a link-by-link inspection are listed.

A page is devoted to selecting and ordering the correct chain slings. A chart is included to identify the different types which may be ordered from the 15 J&L Wire Rope Division service centers listed in the brochure.

Sonic Caliper Log

Schlumberger Well Surveying Corporation has combined its widely applicable Sonic Log with a Caliper Log in a single, simultaneously recorded operation. The combination results in increased logging efficiency and lower costs.

In addition to its many other applications, the Caliper Log is valued by log analysts as an aid to interpretation of the Sonic Log. In particular, when viewed together with the Sonic or other open hole logs, it helps to identify those formations which are permeable. The simultaneous recording of the two logs on the same film facilitates interpretation.

In addition to reduced logging charges resulting from the combined services, savings to the operator include a reduction of rig time expended in the logging operations.

Continental-Emsco Announces Tubular Department Changes

Two personnel changes in the tubular department of Continental-Emsco Company have recently been announced. **Joe T. Gailus,** manager line pipe, will now also be in charge of nonferrous pipe sales.

Gailus has served Continental-Emsco as a special representative, salesman, clerk, assistant district

Joe T. Gailus

Leslie D. Murphy

manager tubular sales, and district manager tubular sales.

Leslie D. Murphy, former assistant manager oil country tubular sales, is now manager tubular administration department. Murphy has been a clerk, trainee, sales representative, division tubular representative, division oil country tubular salesman and a field salesman.

New Literature By Lunkenheimer Co.

The new Lunkenheimer Ball Valve is described and detailed in a two-page, two-color catalog sheet by the Lunkenheimer Co., of Cincinnati.

The bulletin, Circular 611, details the operation of the valve, shows cutaway views, ratings, describes specific design features and dimensions, reports on applications and advantages.

It may be obtained by writing the Lunkenheimer Co., Cincinnati 14, Ohio.

Standard Oil of Calif. Sets Depth Record in Canada

Two new Canadian drilling records were established by Commonwealth Drilling Co., Ltd., in drilling near Natal, B. C., for Standard Oil Co. of California.

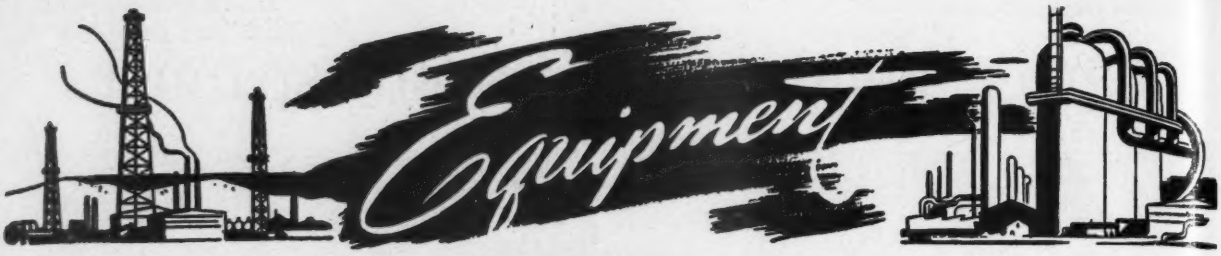
Completed at a total depth of 16,540 feet, the well exceeded the previous record for depth of hole. Below the 1,068 feet of surface casing, the contractor left 15,472 feet of open hole, making a new record for open hole.

Charter member of the "globe-spanners"

YESTERDAY—Texaco began serving aviation, long before air travel was a way of life. Captain Frank Hawks, famed early flier, was Texaco's aviation specialist for many years. In 1930 he spanned the continent in Texaco No. 13. Time: 12 hours, 25 minutes, 3 seconds!

TODAY—Airline jets span the United States in less than five hours...many flying on Texaco fuels and lubricants. In fact, since the beginning of commercial aviation, millions of scheduled airline miles have been flown on Texaco aviation products.

TEXACO



Halliburton Flow Instruments

Accurate, economical in-line flow measurement and analyses are provided by Halliburton Company's Turbine Flow Meter and Flow Analyzer.

Original development of these instruments was to improve cementing and fracturing services. Being easily portable, the instruments offer wide usage for refineries, research and other uses where dependability and portability are required. Abrasive and other difficult applications have not affected the accuracy of the Flow Meter.

Working in tandem, the Flow Analyzer receives a pulse-type electrical signal from the Flow Meter showing flow rate and totalized flow. The Flow Analyzer is a self-powered unit that can be used at a location remote from the Flow Meter. The electric circuitry, mounted on etched circuit boards, provides a more compact and dependable unit.

The Halliburton Turbine Flow Meter produces an electrical signal with the frequency proportional to flow rate. This signal can be transmitted to instruments more than 100 feet from the meter. If desired, either instrument may be furnished separately, and the Flow Meter is readily adaptable to DC current or 3 to 15 psi air signals for an exterior power source.

For further information, write Special Products Division, Halliburton Company, Duncan, Oklahoma.

Turbine flow meter and flow analyzer

TELEDRIFT—On exhibition in Chicago

Two-Story Teledrift Exhibit By Borg-Warner in Chicago

TELEDRIFT, an advanced type signalling device used in oil well drilling operations, was the subject of a new two-story high exhibit installed in the Borg-Warner Exhibition Hall in the Borg-Warner Building, 200 S. Michigan Ave., Chicago, Illinois.

The animated and colorful display was erected in connection with the annual meeting of the American Petroleum Institute which was held in Chicago Nov. 14-17. Convention guests were invited to inspect the exhibit and view other oil field tools which were displayed at the hall.

TELEDRIFT and a wide range of other oil well tools are produced by the Byron Jackson Division of Borg-Warner Corporation. TELEDRIFT is a signalling device installed in the oil well drilling pipe "string" to furnish fast surface reports on whether drilling is straight.

In drilling an oil well it is important to know whether the hole is "on course" or how much it is "drifting" from vertical. Previously drilling operations had to be shut down while special "drift" recording instruments were run down to the bottom of the hole.

Now TELEDRIFT permits deviation readings to be taken at any time during drilling operations with only a 45 to 60-second pause in drilling.

National Offers New Test Unit

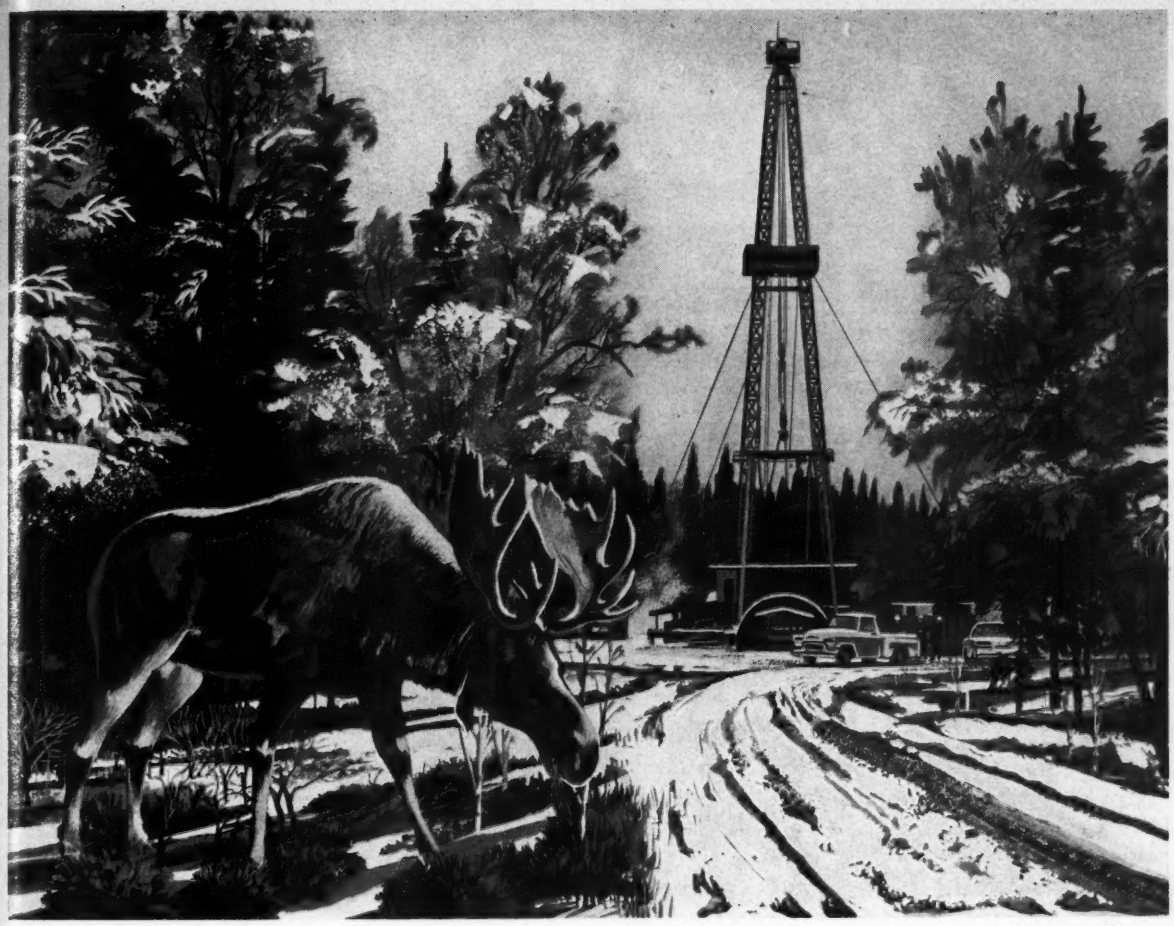
Using pneumatic operating Mani-Flo valves, the new National packaged well test unit, manufactured by National Tank Company, Tulsa, automatically diverts fluid streams from wells, then separates, measures and records production.

Through a weatherproof control panel, the unit automatically programs any number of wells, in sequence, for scheduled test; separates the oil, gas and water; measures oil and water in a liqua-meter located in the legs of the monotube separator and records the accumulated volume of each product on reset counters. Gas measuring and recording features may be added to the unit.

A strip chart recorder indicates if well is flowing and/or surging, best production hours, proper operation of pumping well and accurate well performance.

Separated products are comingled and returned to the production line after test. Any power failure diverts all valves to production and any or all wells may be shut in manually.

Pneumatic operating Mani-Flo valves



Of Moose And Men...

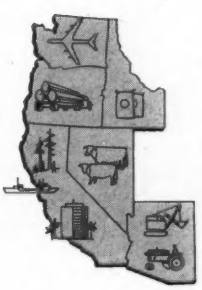
and multiple land use

The search for oil sometimes makes strange companions. On Alaska's Kenai Peninsula—oilmen and moose. When Richfield and Standard of California began joint development of oil production in the heart of the Kenai Moose Range, some wildlife conservationists had their doubts. What would happen to the moose?

The answer is...the moose herd is thriving. Through close association with the United States Department of the Interior, oilmen learned that dense spruce thickets limit the growth of "secondary" vegetation, prime food source for the moose. Whenever drilling operations require clearing of these thickets, the moose will enjoy a food supply more plentiful than ever before.

Wells are widely spaced. And to preserve the rugged beauty of this vast wilderness, derricks are removed as soon as wells are completed.

Thus, oil development in our 49th State has helped the Kenai moose population – a fine example of wise multiple use of Government-owned lands. It is sound conservation of two great natural resources.



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OIL CORPORATION
LOS ANGELES, CALIFORNIA

Field Development

LOS ANGELES BASIN

Inglewood Test for Standard

Standard Oil Company is awaiting contractors' bids for Windsor Hills No. 2 to be drilled near the intersection of Slauson and La Brea Avenues on Section 16-2s-14w. The well will be drilled to about 11,000 feet.

Huntington Beach Field Well

BOMASP of Long Beach is ready to spud Reservoir No. 3, a proved field development well, located near the intersection of Summit and Smeltzer Streets on Section 3-6s-11w.

Torrance Test

C. L. Fowler, Operator, is preparing to drill Laco No. 1, a 3,800-foot test near the intersection of Figueroa and Sepulveda on Section 19-4s-13w. The operator has sufficient acreage under lease to drill several wells.

Prado Dam Discovery

Alpoil Company's Govt.-TMP-C No. 1 swabbed oil at a 50-barrel-per-day rate from the interval 2,758-3,125 feet and is moving off rotary preparatory to placing the well on the pump. Oil is 25 gravity and gas was estimated at 150 mcf per day. The discovery is located in the southwest quarter of Section 17-3s-7w and was drilled to a total depth of 3,569 feet and plugged back to 3,125 feet. 7" casing is cemented at 2,752 feet. The rig is being moved 660 feet south to drill Sardco No. 1.

Las Cienegas

Union Oil Company is drilling below 1,500 feet on its eighth well in the recently discovered field. Surface location for Union-Signal-Pacific Electric No. 8 is south and east of the intersection of Pico Blvd. and La Brea Ave. in Section 27-1s-14w. All of the other wells in the field are shut in awaiting a pipeline.

NORTHERN CALIFORNIA

Middle River Gas Test

Great Basins Petroleum Co. is grading location for Mohawk-Intex-West-Gaul No. 52-19 in the southwest quarter of Section 19-1s-6e in San Joaquin County. The well will be a 6,000-foot test and is about seven miles northwest of the McMullin Ranch Gas field.

Hooker Dome Wildcat

Humble Oil & Refining Company is grading roads and rig site for Joseph L. Price et ux No. 1 to be drilled in the northwest quarter of Section 36-29n-4w in Tehama County. The location is ten miles north of the town of Red Bluff in the same area where the Hooker Dome Syndicate drilled and abandoned two tests, both of which are reported to have logged fair gas shows.

Bishop Oil Gas Test

Bishop Oil & Gas Properties has staked a location for Anderson No. 1, a gas test in the Table Bluff area. The well will be drilled in the northeast quarter of Section 1-3n-2w in Humboldt County and is a northwest offset to the Zephyr Oil Company's Leon Oro Blanco No. T-3 completed from the interval 4,236-4,425 feet flowing 1,400 mcf of gas through a 5/16" bean.

Amerada Gas Completion

Amerada Petroleum Corp., Operator, completed David Comber Gas Unit No. 1 flowing 3,860 mcf of gas per day through a ¼" bean from the perforated interval 6,850-6,866 feet. The completion, a southerly offset to production, is located in the northwest quarter of Section 19-6n-2e in the Bunker area of Solano County. Total depth of the well is 7,228 feet with 4½" casing cemented at 6,950 feet.

Cameron-Franco Western Test

In the Grimes area of Sutter County, Cameron Oil Co. and Franco Western Oil Co. have staked location for Sanborn No. 1, a wildcat test in the southwest quarter of Section 9-14n-1e. Nearest production is approximately 1½ miles to the northwest.

Standard Gas Completion

Standard Oil Company of Calif. completed Blossom Community No. 1 flowing 2,005 mcf of gas per day from the perforated intervals 3,517-3,530 and 3,534-3,541 feet. Flow was through a ¼" bean with pressures of 1,323/1,372 psi. Located in the southwest quarter of Section 32-5n-5e near the West Thornton Field in San Joaquin County, the completion was drilled to a total depth of 4,418 feet, and cemented 5½" casing at 3,630 feet.

Colusa County Gas Test

Rinde Oil Company awarded a contract to the Brown Drilling Co. to drill a 4,000-foot Colusa County wildcat test. The well is located in the Catfish Bend area on Section 3-17n-1w approximately 1½ miles east of Universal Consolidated Oil Company's recent new field discovery. Rinde Oil Co. has about 3,000 acres under lease in the area.

San Joaquin County Outpost

Great Basins Petroleum Company is starting Signet-Kroman No. 23X-30 located in the northwest quarter of Section 30-2s-7e in San Joaquin County. The well is an outpost test of the McMullin Ranch Field, ½ mile east of present production.

Solano Gas Test Abandoned

In the Davis area of Solano County, Victory Oil Co. drilled to a total depth of 4,802 feet on Universal-Harrison Trust No. 1 and after running logs plugged and abandoned the well. The abandonment was located in the northwest quarter of Section 28-8n-2e seven miles east of the Winters Gas Field.

Nance Gas Test

G. R. Nance of Los Angeles has staked location for Barbara C. Bell No. 1, a wildcat gas test in the northwest quarter of Section 35-7n-2e in Solano County. This wildcat test is one mile north of the Millar Gas Field.

Two Gulf Gas Tests

Gulf Oil Corp. of Calif. is preparing to drill two gas tests on the

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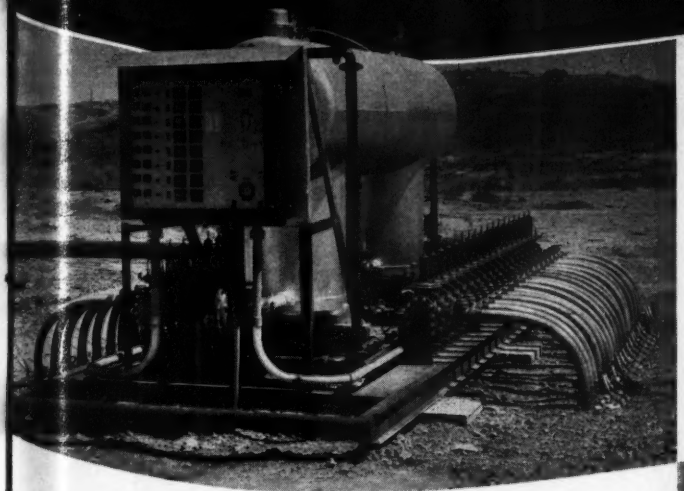

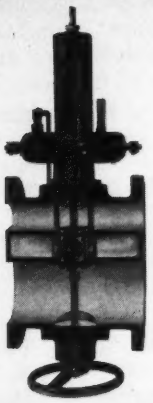

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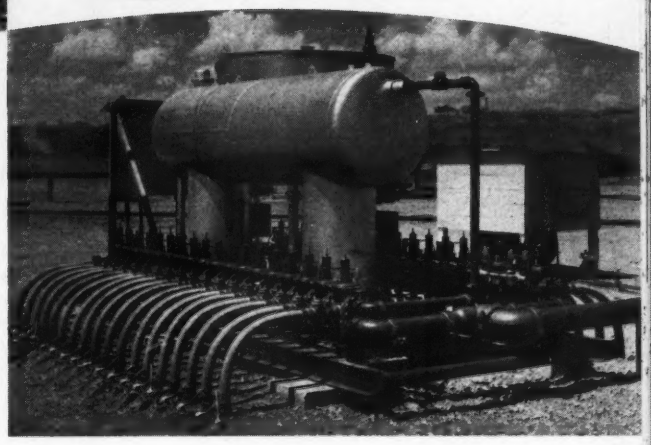

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- Separates oil, gas, and water.
- Measures the oil and water in the National Type B Liqua-Meters located in the legs of the National O-G-W MONOTUBE® SEPARATOR.
- Accumulates the volume of each product on the reset counters on the control panel.
- Strip Chart Recorder records production in relation to time.
- Separated products commingled and returned to the production line after test.
- Electric control panel actuates the pneumatic operated MANI-FLO valves to place well on test or production.
- Pictured unit does not measure or record gas production, but facility may be added at nominal cost on the same skid.
- Any power failure diverts all valves to production.
- Wells may be shut in manually with handwheel on bottom of MANI-FLO valve.

CONTROL PANEL

Weatherproofed and rain shielded. Clear plastic window allows complete visibility of all counters, well selector switches, and Strip Chart Recorder. Light indicates well on test.

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If well is flowing and/or surging.
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Wilkins Unit lease in the Buckeye area. Wilkins Unit F No. 1 will be drilled in the southwest quarter of Section 18-13n-1e and Wilkins Unit I No. 1 is located in the northeast quarter of Section 14-13n-1w, both in Colusa County.

Brown Gas Test

E. C. Brown, Operator, has staked a location for Sherman Island Gas Unit B No. B-1 in the northwest quarter of Section 36-3n-2e in Sacramento County. Located three miles west of the southern end of the Rio Vista Gas Field, the well will be a 4,500-foot test.

Standard Drills at Solano County

Standard Oil Company of Calif. is preparing location and roads for Peter Cook No. 13 to be drilled in the center of the southwest quarter of Section 12-4n-2e.

Standard Yolo County Test

Standard Oil Co. of Calif. is preparing to drill Horgan Community No. 1 located in the southwest quarter of Section 5-10n-1e. The test is in the Dunnigan Hills area three miles southeast of the Artnell Company's deeper pool discovery.

Rheem Gas Test

Richard S. Rheem, Operator, has drilled and abandoned F.L.A. No. 1 located in the southeast quarter of Section 13-17n-2w in Colusa County. Drilled to a total depth of 3,000 feet, the test was located 1½ miles south of the Compton Landing Gas Field.

San Joaquin County Wildcat

Gulf Oil Corp. of Calif. is grading roads and rig site for Empire Tract Unit No. 1 in the northwest quarter of Section 36-4n-4e in the Empire Tract area. This wildcat gas test is ten miles east of the Rio Vista Gas Field.

Rheem Wildcat Test

Richard S. Rheem, Operator, is moving in rotary to drill Kern-Lower Jones Gas Unit No. 1, a wildcat gas test located in the southeast quarter of Section 7-1n-5e in San Joaquin County. The rig site is two miles west of the Roberts Island Gas field and the well will be drilled to about 5,500 feet.

Occidental Well Tested

Occidental Petroleum Corp. is drilling below 8,100 feet on Sachreiter No. 1 after testing the interval 7,652-7,677 feet for a stabilized flow of 11,500 mcf of gas per day, flowing through a ½" bean and some recoverable condensate. The test is located in the West Grimes area on the southeast quarter of Section 4-14n-1w in Colusa County. The well is being drilled on a 5,000-acre block.

Sutter County Wildcat

Atlantic Oil Company is preparing to drill Unit A No. 1, an 8,000-foot test located in the southeast quarter of Section 36-15n-1e in the Grimes area.

COASTAL AREA

Rancho Simi Wildcat Test

Schmidt Associates (Ben Gould, Agent, 3460 Wilshire Blvd., Los Angeles) have staked location for Well No. 1 on Lot 55 in the northeast quarter of Section 29-3n-19w in Ventura County. Location of the test falls three miles south of the Shiells Canyon Field.

Bardsdale Field Development Well

Kenneth H. Hunter, Jr. Exploration has awarded a contract to A. D. Rushing to drill Robertson No. 1, a field development well in the southeast quarter of Section 1-3n-20w.

Shell Wildcat Test

Shell Oil Company has staked a location for Sloan No. 1, a Ventura County wildcat test south of the town of Piru on Section 28-4n-18w.

Monterey County Outpost Testing

Westates Petroleum Company is waiting on a pump unit to complete Doud No. 44, an apparent new zone discovery. Top of the new zone, the 44 Sand, was logged at 2,007 feet and top of the Doud Sand at 2,748 feet. Located near the center of Section 19-19s-7e, the well was drilled to a total depth of 3,045 feet, plugged back to 2,227 feet, and has 7" casing cemented at 1,993 feet.

Standard Offshore Test

Offshore from Orella in Santa Barbara County, Standard Oil Company of Calif. is starting to drill State 2198.1 No. 2 in projected Section 2-4n-31w. The well is being drilled from a floating vessel, S. M. Barge No. 1, about 2,800 feet offshore.

South Tapo Test

In the Tapo Field, G. R. Nance is grading roads and rig site for Tapo No. 3 to be drilled in the northwest quarter of Section 1-3n-18w.

Monterey County Wildcat

Texaco Inc. is grading roads and rig site for F. K. Kock No. 1, a wildcat test to be drilled in the southwest quarter of Section 20-22s-10e. Rig site is about three miles northwest of the San Ardo Field and this will be a 3,000-foot test.

Timber Canyon Field

Richfield Oil Corp. has set a conductor pipe for E. P. Clark No. 20, a field development well to be drilled in the southeast quarter of Section 14-4n-21w.

Oxnard Field Development

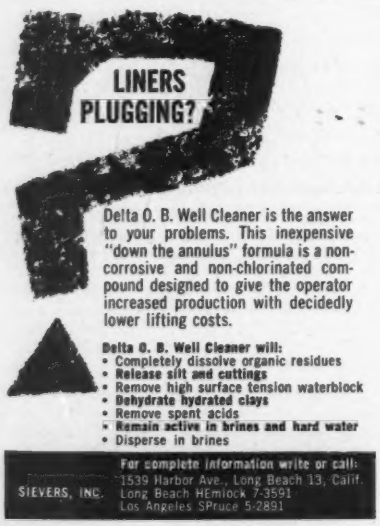
Getty Oil Company is preparing to drill Maulhardt No. 6, a field development well located near the intersection of Rice and Wooley Roads on Section 12-1n-22w. The well will be a 6,600-foot test.

G. R. Nance has staked location for Capital Company No. 1, a shallow test to be drilled on Section 5-1n-21w south and east from the intersection of Sturgis and Wolff Roads.

SAN JOAQUIN VALLEY

Gosford Completion

Universal Consolidated Oil Company completed KCY No. 88X-23 flowing 250 b/d of 32 gravity oil with a cut of 1.6 per cent. Flow was from the perforated interval 9,670-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9,695 feet through a 15/64" bean with a flow pressure of 400 psi. Located on the southerly edge of the Gosford field in the southeast quarter of Section 23-30s-26e, the completion was drilled to a total depth of 10,375 feet and cemented 7" casing at 9,770 feet.

Fruitvale Outpost Test

I. S. R. Company is preparing to spud Sa Ja Do No. 2 located near the north quarter corner of Section 28-29s-27e. The location falls approximately ¼ of a mile northeast of the operator's Sa Ja Do No. 1, an apparent new fault block discovery which tested at about 100 b/d of 24 gravity oil.

Dudley Ridge Gas Test

Jacalitos Petroleum Company has staked location for Mohawk 91 Land Company No. 5-14 in the northwest quarter of Section 14-23s-19e. The well will be a 1,400-foot gas test.

Shell Gas Test

Shell Oil Company is grading rig site for Alpaugh Unit No. 4 in the northeast quarter of Section 7-24s-23e. The test is a gas development well in the Trico field, Tulare County.

South Wasco Test Abandoned

Patrick A. Doheny failed to log commercial showings in Unit No. 28-1 and after drilling to a total depth of 6,010 feet plugged and abandoned the test. The well was located in the northeast quarter of Section 28-27s-24e.

Universal Wildcat Test

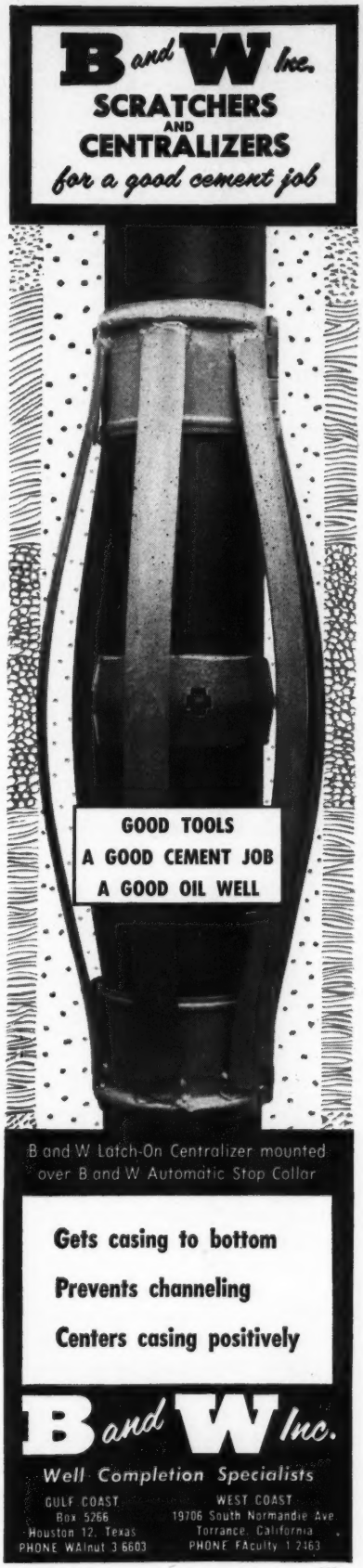
Universal Consolidated Oil Company has awarded a contract to Haney & Williams to drill KCL No. 13-10 in the northwest quarter of Section 10-30s-25e in Kern County. The location falls approximately one mile northwest of the Canal field and will test the Stevens at about 10,000 feet.

Cuyama Valley Test Abandoned

W. S. Payne, Jr., Operator, abandoned Russell No. 1 at a total depth of 1,805 feet. On a test of the interval 1,090-1,114 feet, fresh water was recovered. Location of the test was in the northwest quarter of Section 4-10n-26w in San Luis Obispo County.

Burrel Outpost Test

Arrowhead Exploration Company is moving in rotary to drill an easterly outpost test of the Burrel field.



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The well, U.C.L. No. 71-8, is located in the northeast quarter of Section 8-17s-19e.

North Tejon Completion

Standard Oil Company of Calif. completed Muzinich No. 338-16 pumping 132 b/d of 32 gravity oil cutting 58 per cent from a casing notch at 12,380 feet. The well is located in the southwest quarter of Section 16-11n-19w and was drilled to a total depth of 12,498 feet.

Twenty-Four Socony Mobil Locations

Socony Mobil Oil Company, Inc., has staked locations for 24 field development wells in the Lost Hills Field on the Lost Hills Two lease. Six of the wells will be drilled in Section 13-25s-20e and eighteen in Section 19-26s-21e.

Wheeler Ridge Completion

In the Windgap area, Richfield Oil Corp. completed KCL-L No. 12-36 flowing 100 b/d of 21 gravity oil cutting 4 per cent through a 32/64" bean from the interval 5,834-5,897 feet. Located in the northwest quarter of Section 36-11n-20w, the completion was drilled to a total depth of 5,899 feet and cemented 7" casing at 5,835 feet.

Tejon Outpost Completion

Drilling & Production Company completed O.M.B. No. 26-33 pumping 110 b/d of 26 gravity oil cutting 30 per cent. Drilled to a total depth of 5,496 feet, and after plugging back to 4,836 feet, 5½" casing was cemented at 4,941 feet. Location of the well is in the southwest quarter of Section 33-11n-19w.

Coles Levee Development Well

Richfield Oil Corp. has staked location for C.L.-A. No. 82-33 in the northeast quarter of Section 33-30s-25e. The well will be a 9,350-foot field development well.

Greeley Field

Standard will drill a Water Flood well, Lewis No. 6, located in the northwest quarter of Section 12-29s-25e. Scheduled depth of this edge well is 11,700 feet.

OTHER AREAS

Alaska

Union Oil Company of Calif. and The Ohio Oil Company drilled to a total depth of 5,125 feet on Kenai Unit No. 13-4 and after cementing 7" casing at 5,100 feet is testing for gas. The test is located in the south-

west quarter of Section 4-4n-1w in the Kenai area, two miles east of a gas discovery well on the Kenai Unit.

In the Cook Inlet Basin, Standard Oil Co. and Richfield Oil Corp. have moved in rotary and are ready to spud Falls Creek No. 1 located on Lot 3-1n-12w. The location is about 20 miles southwest of the Union and Ohio's Kenai Unit gas discovery.

Standard Oil Co. and Richfield Oil Corp. completed Soldotna Creek Unit No. 34-33 flowing 1,000 b/d of clean oil from a total depth of 10,815 feet. 5½" casing is cemented at 10,815 feet. Location of the completion is in the southeast quarter of Section 33-8n-9w.

Arizona

The Superior Oil Company's Navajo-M No. 23-21 is drilling ahead after testing showings logged in the Desert Creek Zone of the Pennsylvanian. At the time of the test the hole was bottomed at 5,122 feet. The test is located in the southwest quarter of Section 21-41n-30e near Bita Peak in Apache County and is a projected Devonian test.

Colorado

El Paso Natural Gas Company completed Ignacio No. 33-7 flowing 22,398 mcf of gas per day from the Dakota perforations 7,820-7,738 feet. The completion is located in the northwest quarter of Section 20-33n-7w in La Plata County and was completed at a total depth of 7,871 feet.

Montana

Locations for four new wildcats have been staked in the Tule Creek area of Roosevelt County in the general area where Murphy Corp. recently completed a Devonian discovery. All four of the wildcats will test the Devonian expected to be logged between 7,000 and 8,000 feet. Three miles north of the discovery, Sinclair Oil & Gas Co. will drill Stai No. 1 in the southeast quarter of Section 31-31n-48e and Humble Oil & Refining Company has a location for Isachen No. 1 in the southeast quarter of Section 11-30n-47e. Two miles northwest of the discovery well, Davis Oil Company will drill Rush No. 1 in the southeast quarter of Section 27-31n-48e and Stensland No. 1 will be drilled in the southeast quarter of Section 16-31n-47e.

American Climax Petroleum Company and Lawrence Barker, Jr., are ready to move in a drilling rig on N. P. No. 23-1 located in the northeast quarter of Section 23-10n-28e in Musselshell County. This wildcat will test the Tyler at about 4,600 feet and is four miles west of production at the Melstone Field.

Cabeen Exploration Company of Los Angeles has graded a rig site for Wetzel No. 1 in the northeast quarter of Section 20-34n-6w in Glacier County. The wildcat is scheduled to test the Madison at about 3,300 feet and is 1½ miles west of the Cut Bank field.

Nevada

Shell Oil Company is preparing to drill Eagle Springs Unit No. 62-35 located in the northeast quarter of Section 35-9n-57e in Nye County. The test will be drilled to approximately 7,800 feet and is a southerly offset to the Eagle Springs Unit No. 1, the discovery well of the field, completed in 1954 flowing 365 b/d of 25 gravity oil with a 6 per cent cut from the interval 6,730-6,450 feet.

New Mexico

Kern County Land Company is drilling below 2,000 feet on Shell-Navajo No. 1-21 located in the northwest quarter of Section 21-29n-18w San Juan County. Scheduled to test the Devonian at about 7,500 feet, the well is three miles southeast of the Rattlesnake Field.

Continental Oil Company's deep test of the Rattlesnake Field, Rattlesnake No. 1-36, drilled to 6,850 feet and is running logs. Located in the southeast quarter of Section 2-29n-19w, oil and water were recovered from the Paradox interval 6,665-6,715 feet. The Rattlesnake Field produces from the Dakota.

Humble Oil & Refining Company has commenced drilling on Navajo-L No. 8 located in the northeast quarter of Section 36-29n-14w in San Juan County. The well is about one mile from Gallup production in the Ojo Field.

Utah

Champlin Oil & Refining Company has announced a location for Navajo-111 No. 1, a San Juan County wildcat test in the northeast quarter of Section 13-43s-24e near Anido Creek. The well will be drilled to about 6,800 feet to test the Mississippian and is seven miles south of Pennsylvanian production in the Aneth area.

Pubco Petroleum Corp. completed Federal No. 1 flowing 1,288 b/d of 54 gravity clean oil from the Missis-

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sippian perforations 8,550-8,672 feet. Flow was through a 43/64" bean and gas was gauged at 2,863 mcf per day. Located in the southwest quarter of Section 12-30s-24e in San Juan County, the completion was drilled to a total depth of 9,170 feet and cemented 7" casing at 9,169 feet. The well is a southeast outpost of the Lisbon Field and logged the top of the Mississippian at 8,434 feet. Tests on the lower part of the hole recovered mud, gas and oil shows.

Standard Oil Company of Calif. drilled to a total depth of 8,523 feet on Arnold No. 21-15 and after running logs is conditioning the hole. On a one-hour test of the interval 8,368-8,472 feet, gas flowed at a 4,000 mcf per day rate and oil at 23 barrels per hour. High shut-in pressure was 4,710 psi. Previous tests of the interval 8,129-8,223 feet flowed 1,425 mcf of gas per day and from 8,222-8,370 feet flow was 3,300 mcf per day rate. The well is located in the northwest quarter of Section 15-30s-24e in San Juan County, south of the Lisbon Field.

Shell Oil Company is preparing to drill Dzaneez No. 1, a 5,350-foot Mississippian test in the southwest quarter of Section 34-42s-20e in San Juan County. The wildcat is located in the Chinile Wash area where a limited amount of drilling has been done.

Wyoming

Union Oil Company continues to test its Niobrara County wildcat, Gov't. No. 1. On the latest test the well flowed 100 b/d rate from the Mowry perforations at 7,426 and 7,428 feet. The discovery is five miles north of East Lance Creek production in the southeast quarter of Section 29-37n-64w. Total depth of the well is 7,970 feet and 5½" casing is cemented at 7,870 feet.

On a farmout from Skelly Oil Company, Stuarco Oil Company is making arrangements to drill a 6,000 foot Morrison test. The wildcat test, Government No. 1, will be drilled in the northeast quarter of Section 29-52n-68w in Crook County and is about three miles north of Dakota production at Miller Creek.

Continental Oil Company has staked a location for a 12,000-foot Tensleep test in the Big Horn Basin. Location for the wildcat test, White Elk No. 1, is in the southeast quarter of Section 36-54n-95w in Big Horn County.

In the Kummerfield area of Crook County, four Dakota tests are in the process of being completed. Mobil Oil Company's Gov't. No. F-21-5 in the northwest quarter of Section 5-50n-68w, on a test flowed at a 530 b/d rate from the Dakota perforations 6,092-6,106 feet. The well is the field's most southerly location and was drilled to a total depth of 6,150 feet. The test logged the Dakota at 6,041 feet and cemented 4½" casing at 6,149 feet.

Trigood Oil Company's Lucerne Govt. No. 4 located in the southeast quarter of Section 31-51n-68w on the west flank of the field is running casing. On an open hole test of the Dakota interval 6,150-6,170 feet flow was 32 barrels per hour. Total depth is 6,170 feet. Trigood's Lucerne Govt. No. 2 located in the northwest quarter of Section 32-51n-68w was good for 625 b/d flowing through a 22/64" bean from the Dakota perforations 6,180-6,190 feet. The company's Lucerne No. 3 located in the northwest quarter of Section 32-51n-68w swabbed 10 barrels per hour from the Dakota perforations 6,161-6,169 feet and is rigging a pump unit. Mobil Oil Company has staked a location for a new well as a northerly offset to Trigood's No. 2 completion.

Signal Names Refining Aide

Signal Oil and Gas Company has named **S. A. Patterson** assistant general manager of the manufacturing department, it was announced by **W. T. Hancock,** senior vice president in charge of manufacturing.

Signal has a refinery in Houston, another in Bakersfield, California, and is planning to rebuild the former Hancock refinery in Long Beach, California.

Patterson, who is a vice president, has been in charge of the company's economic development department since early this year. He was named vice president and coordinator of crude oil supplies in 1959.

From 1957 to 1959 he was vice president, general manager, and a director of Bankline Oil Company, which merged with Signal in July, 1959.

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THIS LAUGH

OFF!!

A comely young matron stepped on the drugstore scales after devouring a giant sundae and was shocked at what she beheld. Promptly she slipped off her coat and tried again. The results were still unflattering, so she slid off her shoes. But then she discovered she was out of pennies. Without a moment's hesitation, the lad behind the soda fountain stepped forward.

"Don't stop now," he volunteered. "I've got a handful of pennies and they're all yours."

Her hat was on one side, her clothes rumpled and her shoes were almost in shreds.

"Were you knocked down by a motorist?" queried a sympathetic bystander.

"No, picked up by one," she snapped.

A woman divorced her husband and obtained custody of their 12-year-old son. Then she remarried and her ex-husband was somewhat concerned about the boy. How do you get along with your stepfather?" he asked the lad.

"Fine," said the youngster. "He takes me swimming every day. We go out to the middle and then I swim back."

"Isn't that a long swim for a boy of your age?" asked the father.

"Not too bad. Really, the only tough part is getting out of the bag."

"Just what good have you done to humanity?" asked the judge before passing sentence on the pickpocket.

"Well," replied the criminal, "I've kept three or four detectives working regularly."

"No license, lady?" growled the traffic cop. "Don't you know you can't drive without one?"

"That explains everything," she said. "I thought it was because I was nervous and nearsighted that I hit two cars and ran into a fire hydrant."

A beatnick queried his friend, "What kind of a guy is George—is he with it?"

"No, man, he's from squaresville. The other night, the lights went out in his girl's house and he spent the rest of the evening tinkering with the fuses."

A high school boy happily took home from the library a book whose cover read, "How to Hug." Later he found, to his dismay, it was Volume 7 of the encyclopedia.

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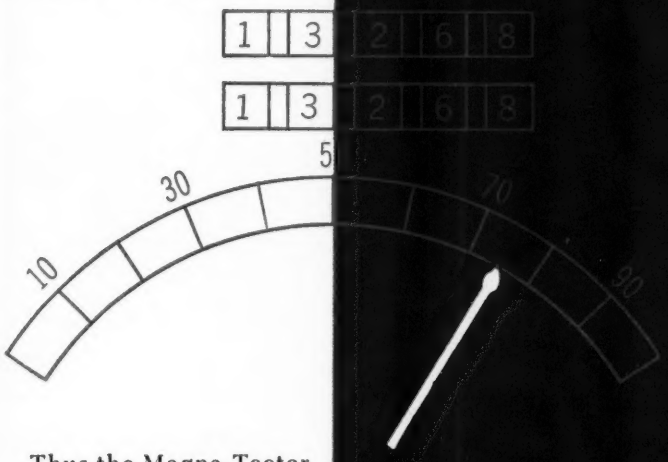

Thus the Magna-Tector paves the way for immediate recovery of *all* free pipe and minimizes the fishing job for remaining stuck sections. It is equally effective in drill pipe, drill collars, tubing or casing.

After the lowest free point has been determined, actual free pipe recovery is accomplished by a McCullough String Shot Back-off, Chemical Tubing Cutter or Jet Casing Cutter.

These companion tools, used with the Magna-Tector, form an unbeatable team for efficient, economical free pipe recovery.

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